

# Notice of Allowability

Application No.

09/897,552

Examiner

Trenton J. Roche

Applicant(s)

SIEVERT, JAMES A.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed 10 March 2006.
2. ☒ The allowed claim(s) is/are 1-8 and 10-25 (renumbered as 1-24).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Brian N. Tufte, Reg. No. 38,638, on 13 April 2006.

The application has been amended as follows:

Claim 4 has been amended as such:

4. **(Currently Amended)** A method for writing a plurality of objects in non-persistent storage to persistent storage, the objects having pointers to objects, unique object identifiers, and object types as attributes, the method comprising the steps of:

providing one or more common interfaces that are used by each of the plurality of objects to write the objects from non-persistent storage to persistent storage;

grouping together said objects into type sets, wherein each of said objects in each of said type sets have the same type, wherein each of said type sets have a set population equal to a total number of objects inhabiting said type set;

counting each of said type sets and arriving at a total number of sets;

converting each of said objects to a persistable form including obtaining a persistable form for each of said pointers to objects by obtaining a unique object identifier corresponding to each of said pointers to objects;

writing said total number of type sets to persistent storage using, either directly or indirectly, one or more of the common interfaces; and

writing each of said type sets to persistent storage using, either directly or indirectly, one or more of the common interfaces.

Claim 5 has been amended as such:

5. **(Currently Amended)** A method for storing and restoring user objects to persistent storage, the method comprising the steps of:

providing one or more common interfaces that are used by the user objects to store and restore the objects to/from persistent storage;

creating a persistence controller object for managing the persistence of the user objects, the persistence controller object being derived from at least one of the common interfaces;

providing a plurality of user defined classes, the classes derived from a common object base class;

creating a plurality of instances of user objects belonging to the user defined classes;

providing a stream-in method and a stream-out method for each of the user defined classes;

registering each added user defined class and added user object in a registry;

grouping the objects according to class;

storing the grouped user objects to persistent storage using either directly or indirectly the persistence controller object and the stream-out methods of the user defined classes;

loading the stored objects from storage into memory using either directly or indirectly the persistence controller object and the stream-in methods of the user defined classes; and

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registering the user objects in the registry.

Claim 13 has been amended as such:

13. **(Currently Amended)** A method for writing a plurality of objects in non-persistent storage to persistent storage, the method comprising the steps of:

providing one or more common object interfaces that are used by each of the plurality of objects to write the objects from non-persistent storage to persistent storage;

each of the common object interfaces having a corresponding common object class;

providing a Persistent Object Registry for maintaining a listing of objects to be saved to persistent storage, wherein the Persistent Object Registry is in communication with a persistent controller object, and the persistent controller object is derived from one or more of the common object classes; ~~and~~

providing a ~~first~~ save method to save all objects in the Persistent Object Registry to persistent storage; and

saving objects in the Persistent Object Registry to persistent storage using the save method.

Claim 19 has been amended as such:

19. **(Currently Amended)** A method for reading a plurality of objects from persistent storage to non-persistent storage, the method comprising the steps of:

providing one or more common object interfaces that are used by each of the plurality of objects to load the objects from persistent storage to non-persistent storage;

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each of the common object interfaces having a corresponding common object class;  
providing a Persistent Object Registry for maintaining a listing of objects that are loaded from persistent storage, wherein the Persistent Object Registry is in communication with a persistent controller object, and the persistent controller object is derived from one or more of the common object classes; ~~and~~  
providing a load method to load objects in the Persistent Object Registry to non-persistent storage; and  
loading objects to non-persistent storage using the load method.

The Examiner's amendment was required to more clearly define the invention and to obviate any possible rejections under 35 U.S.C. §§ 101, 102 and 103.

### ***Allowable Subject Matter***

2. Claims 1-8 and 10-25 (renumbered as 1-24) are allowed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trenton J. Roche whose telephone number is (571) 272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trenton J Roche  
Examiner  
Art Unit 2193

TJR

  
KAKALI CHAKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100